

Summary

Course: CS521 Information Structures with Python

Assignment: Project

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My project is called "Ledger Shredder". Ledger Shredder is a command-line expense tracker that is designed to help people keep an eye on their everyday spending. Instead of relying on a large app or a complex financial platform, Ledger Shredder only focuses on doing a few simple things, such as recording expenses, organizing them, and showing meaningful summaries that make budgeting very easy to understand.

Ledger Shredder is built around two classes. Every expense is stored as a Transaction, and all transactions are managed by a Ledger. With these two classes, users can add new expenses, edit existing expenses, and delete expenses. Users can also view their expenses in different ways, such as listing every expense, filtering expenses by their category, selecting expenses within a specific date range, checking monthly spending and total expenses.

When Ledger Shredder starts, it automatically loads previous expense data from a CSV file. When it closes, it automatically saves everything back to the file, so the user's expense history is always preserved. Ledger Shredder also handles invalid inputs, such as wrong dates or non-numeric amounts, so it won't crash if the user makes some mistakes.

The motivation behind this project came from a real need. As an international student, I have to be extremely careful with how I manage my living costs, school-related expenses, and daily spending. Because every dollar matters, I wanted a tool that let me instantly record purchases and review my spending habits. Ledger Shredder is a practical solution for tracking my budget now, and it may become more useful in the future as I continue to improve it based on my needs.

Ledger Shredder is useful for anyone who prefers a clear and simple way to monitor their finances directly from the command line. It keeps budgeting simple, transparent, and efficiently organized. These qualities make personal finance easier to manage, especially for people like me who need to manage limited resources.